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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/830,184	04/23/2004	Michael E. Konruff	320001.00112	7715

26710 7590 02/28/2006

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EXAMINER

HANNON, THOMAS R

ART UNIT	PAPER NUMBER
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3682

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/830,184

Applicant(s)

KONRUFF ET AL.

Examiner

Thomas R. Hannon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because of the informalities noted in the Notice of Draftsperson's Patent Drawing Review, sent with the previous Office Action. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no support in the original disclosure for claiming: "a lubricant reservoir formed through said adjustment ring and open to the drive shaft". The specification, on page 4, line 20- page 5, line 2 does describe "a cavity 30 formed by an axial surface segment 32 and a radial surface segment 34 adjoining the bearing assembly serves as a lubricant reservoir for the bearing assembly 6." The paragraph further describes a "standard pressure lubrication fitting 36 that is in communication with the cavity 30 through a channel 38" as well as a grease purge cavity 48. Neither the grease purge cavity 48 nor the channel 38 is described as being part of the

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lubricant reservoir. It is therefor improper, and new matter to define a lubricant reservoir that is “formed through said adjustment ring”.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 9, there is an improper double inclusion of the housing. That is, in line 2 “a housing” is positively set forth, yet in line 3, “a housing bore in a housing” is set forth. If the housing in line 3 is same housing as in line 2, this should be made clear. (Note that the housing of line 2 is not “a housing for the gear drive”, but merely a housing.) If not, a clear difference between the two housings must be made, as well as positively set forth the structural relationship between the housing of line 2 and the remaining claim limitations.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbler in view of Katsube.

Hibbler discloses a gear drive having at least one continuously variable drive shaft bearing float an preload adjustment system with an integral seal carrier for a bearing assembly on a drive shaft (20) that protrudes from the gear drive that comprises a threaded housing bore (30)

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in a housing (24) for the gear drive, a threaded adjustment ring (60, column 3, line 17) with ring threads that mate the threads in the housing bore and a thrust surface that constrains a bearing assembly for a drive shaft that protrudes from the housing in fixed axial alignment through the adjustment ring to provide adjustable float and preload of the bearing assembly and at least one shaft seal (at 32) mating with the drive shaft mounted with the adjustment ring. The preload of the bearings as being adjusted by the threaded ring in the threads 30 of the housing 24 inherently anticipates the threaded adjustment ring being loosened and tightened to increase float and preload, respectively. Hibbler does not disclose a shaft seal carried by an inner axial surface segment of the threaded adjustment ring. Katsube is sited to disclose a bearing mounting assembly in which bearing adjustment is carried out by a threaded adjustment ring in a threaded housing. The assembly is sealed by at least one shaft seal (39) carried by an inner axial surface segment of the threaded adjustment ring. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the assembly of Hibbler such that the shaft seal is carried by the adjustment ring, because this is an old and well known manner of mounting shaft seals, as evidenced by Katsube.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hibbler et al. in view of Katsube as applied to claims 1-6 above, and further in view of Ehnts.

With respect to claims 7-9, in Hibbler the area between the adjustment ring and the drive shaft inherently forms a lubricant reservoir. Ehnts discloses a bearing assembly in which a lubricant passage (16) is formed in a housing part adjacent the bearing and opening in a lubricant reservoir (15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the assembly of Hibbler such that the lubricant reservoir formed

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adjacent the bearing has a passage through the adjustment ring, because Ehnts teaches providing parts adjacent a bearing with a lubricant passage to the lubricant reservoir.

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Hannon whose telephone number is (571) 272-7104. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thomas R. Hannon
Primary Examiner
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trh